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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,810	03/04/2005	Nicholas James Midgley	GB920020049US1	8811
26502	7590	11/25/2009	EXAMINER	
IBM CORPORATION IPLAW SHCB/40-3 1701 NORTH STREET ENDICOTT, NY 13760			TAHA, SHAQ	
			ART UNIT	PAPER NUMBER
			2446	
			NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

endiqlaw@us.ibm.com

Office Action Summary	Application No. 10/526,810	Applicant(s) MIDGLEY, NICHOLAS JAMES	
	Examiner SHAQ TAHA	Art Unit 2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 63 - 77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 63 - 77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a Final action for application number 10/526,810 based on after non-final filed on 08/29/2008. The original application was filed on 03/04/2005. Claims 38 - 49 are currently pending and have been considered below. Claims 38, 42, and 46 are independent claims. Claims 1 - 37 are cancelled.

Response to Arguments

Applicant's arguments with respect to claims 63 - 77 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 63 - 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronneburg et al. (US 6,859,830) in view of Overton et al. (US 2002/0032787)

Regarding claims 63, 68, and 73, a method for allocating an additional real application server to an existing pool of real application servers, the pool including a first

Art Unit: 2446

real application server having an application installed therein and communicating with a real data-source server to obtain application data from the data-source server, the additional application server having the application installed therein, **[utilizing a virtual ring structure. In the virtual ring structure, each server is only required to monitor the status of two other servers in the server pool, wherein the servers are connected as shown in Figs. 1 and 2, (Ronneburg et al., Col. 2, lines 8 – 11)],**

the method comprising the steps of: a real management server for the pool receiving performance data for the first real application server and performance data for the real data-source server, **[a server need only transmit ping signals to two other servers (its buddies) in the server pool at any given time. Because each server maintains the status of only two other servers at any given time, wherein the ping signals include performance data of a given server, (Ronneburg et al., Col. 2, lines 12 – 16)],**

the real management server automatically identifying the additional real application server as having the application but not currently allocated to the pool, and the real management server automatically selecting the real data-source server to provide application data to the additional real application server, **[method 300 for adding a new server to the virtual server ring, wherein the new server is added in response to a removed dead server in the cluster, (Ronneburg et al., Col. 5, lines 15 – 20)],**

and automatically sending connection settings for the real data-source server to the additional real application server to configure the additional real application server to

Art Unit: 2446

send subsequent requests for application data to the real data-source server, **[when a server is to be added to the server pool, another buddy reassignment is required, wherein the reassignment is the new connection settings of the new server, (Ronneburg et al., Col. 2, lines 34 – 38)],**

Ronneburg et al. fails to teach that first real application server reaches a predetermined upper level of utilization,

Overton et al., teaches that a portion of the identifiers and respective location associations in the first location server are transferred to a second location server when a performance criterion of the first location server reaches a predetermined performance limit, **(Overton et al., Paragraph 10)**, in order to have a mechanism that would permit queries to be directed only at data repositories with relevant information, **(Overton et al., Paragraph 6),**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronneburg et al. by including that first real application server reaches a predetermined upper level of utilization, **(Overton et al., Paragraph 10)**, in order to have a mechanism that would permit queries to be directed only at data repositories with relevant information, **(Overton et al., Paragraph 6).**

Regarding claims 64, 69, and 74, the method set forth in claim 63 wherein: in response to the step of the real management server automatically determining that the first real application server is functional but has reached a predetermined upper level of utilization, further comprising the step of the real management server automatically

Art Unit: 2446

sending to the additional real application server, port settings for the real data-source server to communicate with the real data-source server to obtain application data from the real data-source server, **[when a server is to be added to the server pool, another buddy reassignment is required, wherein the reassignment is the new connection settings of the new server, (Ronneburg et al., Col. 2, lines 34 – 38)]**.

Regarding claims 65, 70, and 75, the method set forth in claim 63 further comprising the subsequent steps of: based on subsequent performance data of the first real application server, the real management server determining that the first real application server is functional but under utilized such that the first real application server is no longer needed in the pool, and in response, the real management server automatically de-allocating the first real application server from the pool, **[Down servers are removed from the server table, and thus, the server pool, by use of the server table within the SQL server, (Ronneburg et al., Col. 2, lines 25 – 30)]**.

Regarding claims 67, 72, and 77, the method set forth in claim 63 wherein: in response to the step of the real management server automatically determining that the first real application server is functional but has reached a predetermined upper level of utilization, further comprising the step of the real management server automatically sending to the additional real application server a description of an installation path for the real data-source server to support communication with the additional real application server, **[when a server is to be added to the server pool, another buddy**

Art Unit: 2446

reassignment is required, wherein the reassignment is the new connection settings of the new server, (Ronneburg et al., Col. 2, lines 34 – 38)].

Claims 66, 71, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronneburg et al. (US 6,859,830) in view of Overton et al. (US 2002/0032787) and further in view of Watt et al. (2003/0126202)

Regarding claims 66, 71, and 76, Ronneburg et al. teaches a method 300 for adding a new server to the virtual server ring, wherein the new server is added in response to a removed dead server in the cluster, **(Ronneburg et al., Col. 5, lines 15 – 20)**,

Ronneburg et al. fails to teach that a multiplicity of copies of the application are installed in a respective multiplicity of the real application servers in the pool,

Watt et al. teaches several different installed software applications for execution on various servers, **(Watt et al., Paragraph 61)**, in order to add/remove servers from affected server pools, **(Watt et al., Paragraph 51)**,

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the modified Ronneburg et al. by including that a multiplicity of copies of the application are installed in a respective multiplicity of the real application servers in the pool, **(Watt et al., Paragraph 61)**, in order to add/remove servers from affected server pools, **(Watt et al., Paragraph 51)**.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on 571-272-6798.

Art Unit: 2446

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/S. T./

Examiner, Art Unit 2446

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2446